

# TR-1300

 Set using ISO screws



## SPECIFICATIONS

**Circuit System:** 9 transistors (including 1 FET) and  
4 diodes superheterodyne, 3 transistors  
for AUX. circuit

**Frequency Coverage:** MW ; 530 - 1,605 kHz (566 - 187 m)  
SW-1; 1.6 - 3.5 MHz (187.5 - 86 m)  
SW-2; 3.5 - 7.0 MHz (86 - 43 m)  
SW-3; 7.0 - 14.0 MHz (43 - 21 m)  
SW-4; 14.0 - 26.1 MHz (21 - 11 m)

**Intermediate Frequency:** 455 kHz

**Antenna System:** MW; built-in ferrite-bar antenna  
SW; built-in telescopic antenna

**Power Requirement:** Four "D" size flashlight batteries, 6V in  
total or house current by 100V, 117V,  
220V and 240V.

**Power Output:** 1.2W (harmonic distortion, less than  
10%)  
1.7W (maximum)

**Current Drain:** 25 mA at zero signal, 500 mA at  
1.2W output

**Maximum Sensitivity:** MW ; 14 $\mu$ V/m  
(at 50 mW output) SW-1; 1.1 $\mu$ V  
SW-2; 1.0 $\mu$ V  
SW-3; 1.0 $\mu$ V  
SW-4; 1.2 $\mu$ V

**Selectivity at 1,400 kHz:** 45 dB (SHARP position of SELECT.  
switch)  
35 dB (BROAD position of SELECT.  
switch)

**Speaker:** 4" x 6" (10 cm x 15 cm),  
Impedance 8 $\Omega$

**Dimensions:** 10 $\frac{5}{8}$ " (W) x 8 $\frac{3}{4}$ " (H) x 3 $\frac{15}{16}$ " (D)  
(270 mm x 222 mm x 100 mm)

**Weight:** 8 lb  $\frac{1}{2}$  oz (3.65 kg)

# SONY®

## SERVICE MANUAL

**TABLE OF CONTENTS**

<u>Section</u>	<u>Title</u>	<u>Begins on page</u>
<b>1.</b>	<b>BLOCK DIAGRAM, EXTERNAL AND INTERIOR VIEWS</b>	
1-1.	BLOCK DIAGRAM .....	3
1-2.	EXTERNAL VIEW .....	3
1-3.	INTERIOR VIEW .....	3
<b>2.</b>	<b>DISASSEMBLY AND REPLACEMENT</b>	
2-1.	REAR CABINET REMOVAL .....	4
2-2.	CHASSIS REMOVAL .....	4
2-3.	CP CIRCUIT BOARD REMOVAL .....	4
2-4.	IF-AF CIRCUIT BOARD REMOVAL .....	5
2-5.	POWER CIRCUIT BOARD REMOVAL .....	6
2-6.	DIAL CORD STRINGING .....	7
<b>3.</b>	<b>CIRCUIT ADJUSTMENTS</b>	
3-1.	IF ADJUSTMENTS .....	8
3-2.	FREQUENCY COVERAGE AND TRACKING ADJUSTMENTS .....	9
<b>4.</b>	<b>SCHEMATIC DIAGRAM AND MOUNTING DIAGRAM</b>	
4-1.	SCHEMATIC DIAGRAM .....	11
4-2.	CP CIRCUIT BOARD (P1) Conductor Side .....	13
	Component Side .....	15
4-3.	IF-AF CIRCUIT BOARD (P2) Conductor Side .....	17
	Component Side .....	18
4-4.	POWER CIRCUIT BOARD (P3) Conductor Side .....	19
	Component Side .....	19
<b>5.</b>	<b>EXPLODED VIEWS, WIRING DIAGRAM AND PACKING</b>	
5-1.	EXPLODED VIEW (1) .....	20
5-2.	EXPLODED VIEW (2) .....	21
5-3.	WIRING DIAGRAM .....	23
5-4.	PACKING .....	25
<b>6.</b>	<b>ELECTRICAL PARTS LIST FOR TR-1300</b> .....	26
	Hardware Nomenclature .....	28



# SECTION 1

## BLOCK DIAGRAM, EXTERNAL AND INTERIOR VIEWS

### 1-1. BLOCK DIAGRAM

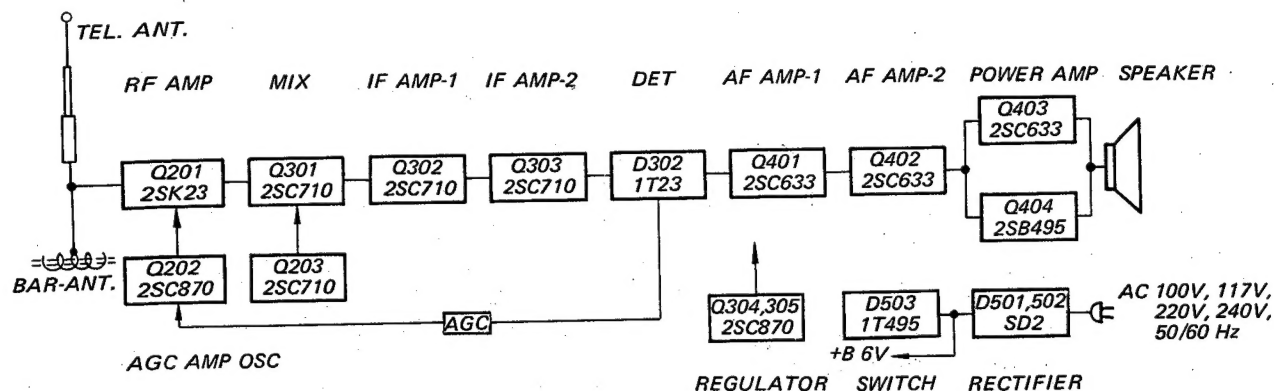


Fig. 1-1

### 1-2. EXTERNAL VIEW

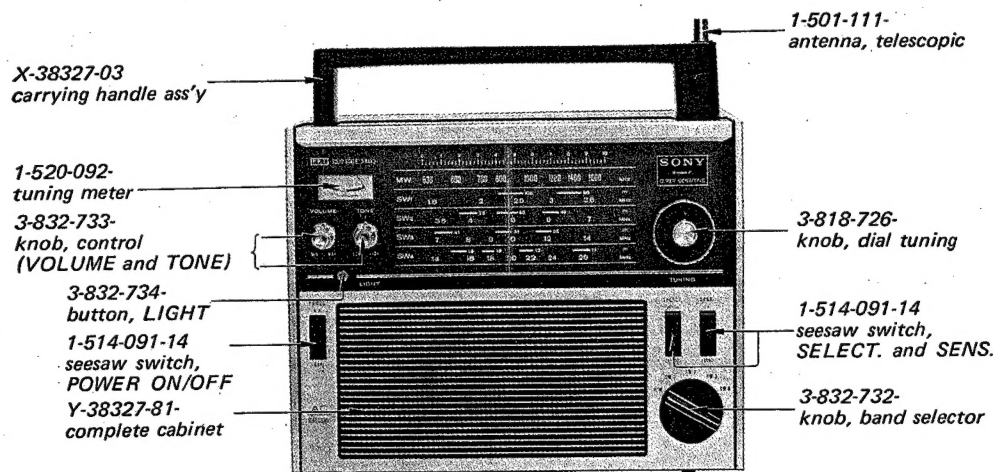


Fig. 1-2

### 1-3. INTERIOR VIEW

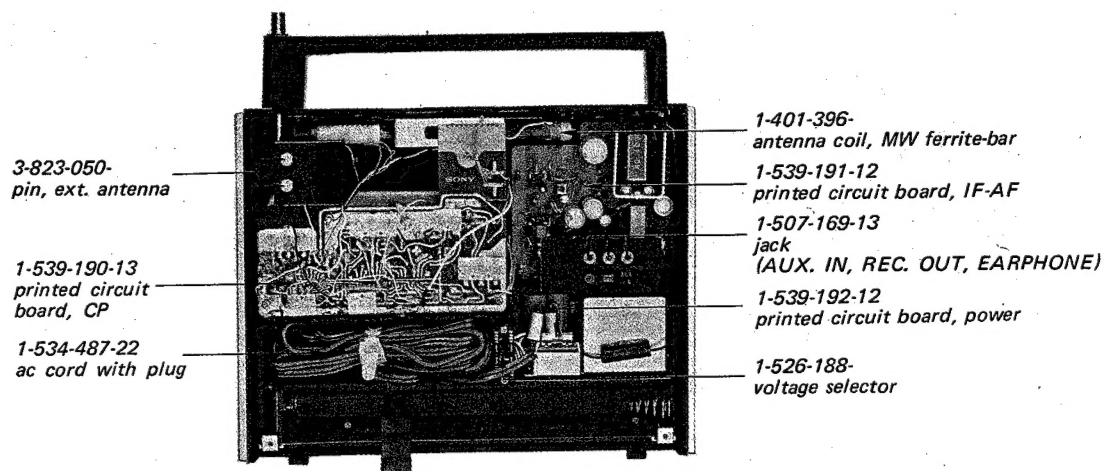


Fig. 1-3

## SECTION 2

### DISASSEMBLY AND REPLACEMENT

#### 2-1. REAR CABINET REMOVAL

1. Place the set rear-side-up on a padded work surface.
2. Remove the three screws labeled **(A)** in Fig. 2-1.
3. Lift up the bottom side of the rear cabinet.

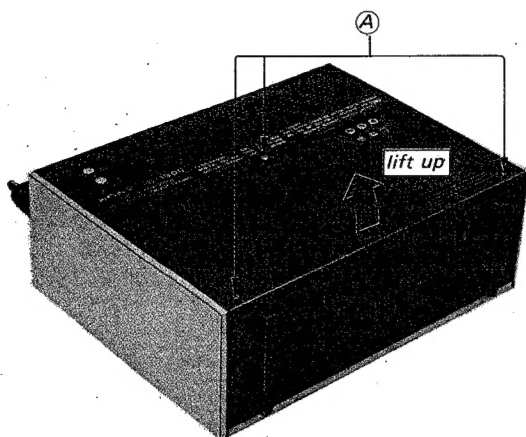


Fig. 2-1 Rear cabinet removal

#### 2-2. CHASSIS REMOVAL

1. Pull out the four knobs, VOLUME, TONE, TUNING and BAND SELECTOR. (See Fig. 2-2.)
2. Remove a screw labeled **(B)** in Fig. 2-2.
3. Pull out the telescopic antenna.
4. Remove the rear cabinet.

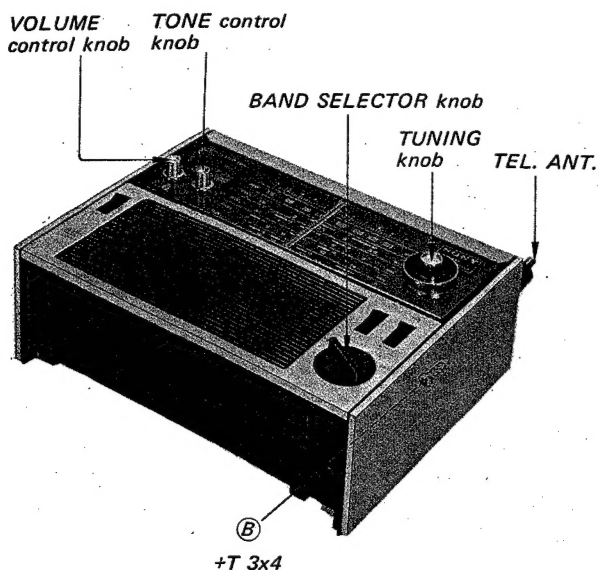


Fig. 2-2 Chassis removal, steps 1 and 2

5. Unsolder the four leads, GRY and RED, in Fig. 2-3.
6. Remove the two screws labeled **(C)** in Fig. 2-3.
7. Lift up the chassis as shown in Fig. 2-4.

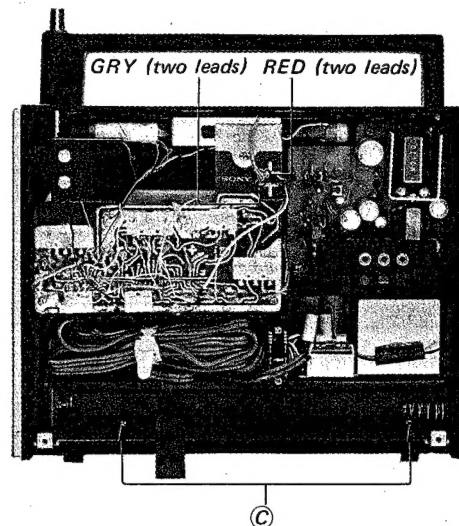


Fig. 2-3 Chassis removal, steps 5 and 6

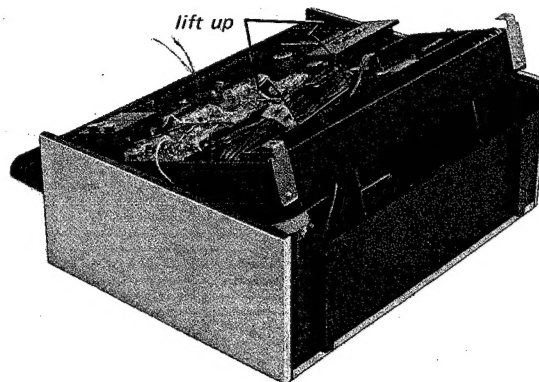


Fig. 2-4 Chassis removal, step 7

#### 2-3. CP CIRCUIT BOARD REMOVAL

1. Remove the rear cabinet.
2. Remove the chassis.
3. Remove the three screws labeled **(D)** in Fig. 2-5.
4. Unsolder the seven leads and two braided wires in Fig. 2-6.
5. Lift up the CP circuit board as shown by the arrow in Fig. 2-5.

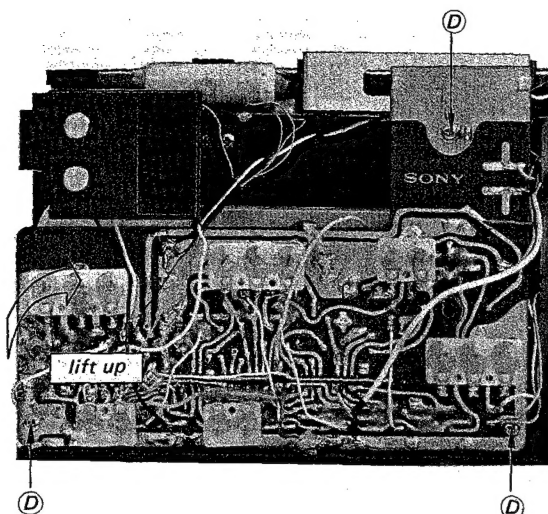


Fig. 2-5 CP circuit board removal, steps 3 and 5

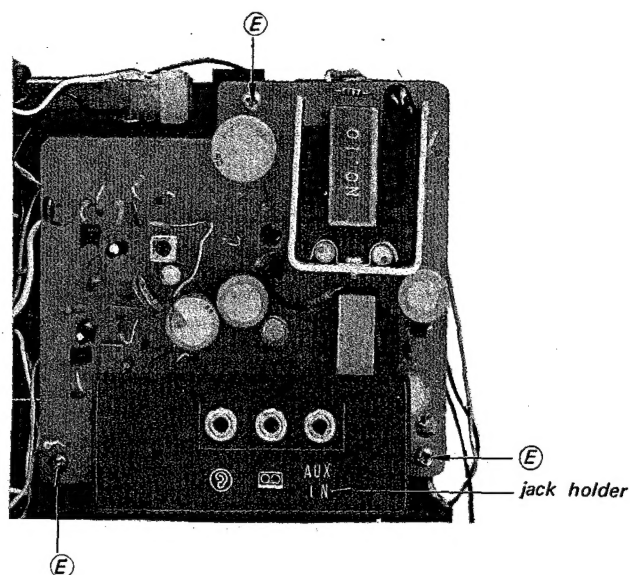


Fig. 2-7 IF-AF circuit board removal, steps 2 and 3

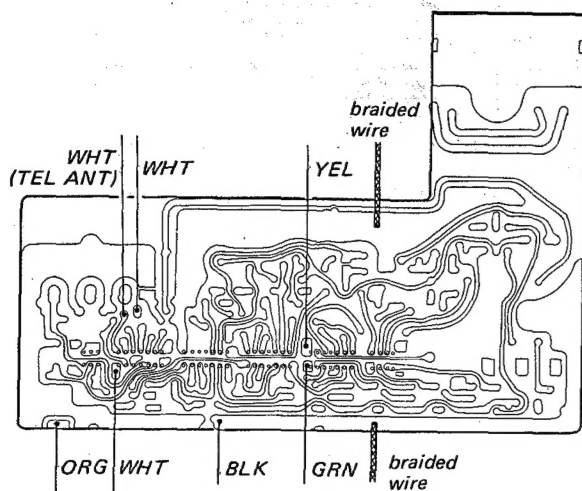


Fig. 2-6 CP circuit board removal, step 4

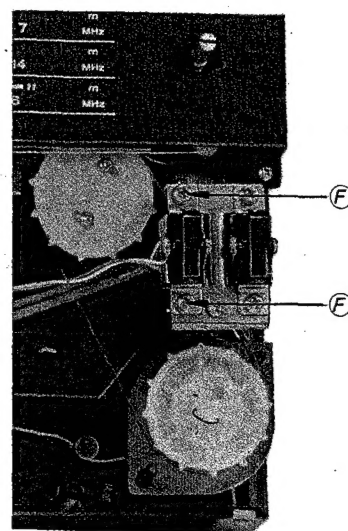


Fig. 2-8 IF-AF circuit board removal, step 4

#### 2-4. IF-AF CIRCUIT BOARD REMOVAL

1. Remove the rear cabinet and the chassis.
2. Pull off the jack holder carefully shown in Fig. 2-7.
3. Remove the three screws labeled ⑤ in Fig. 2-7.
4. Remove the two screws labeled ⑥ in Fig. 2-8.
5. Unsolder the two leads which are connected to the tuning meter shown in Fig. 2-9.
6. Pull out the IF-AF circuit board carefully.

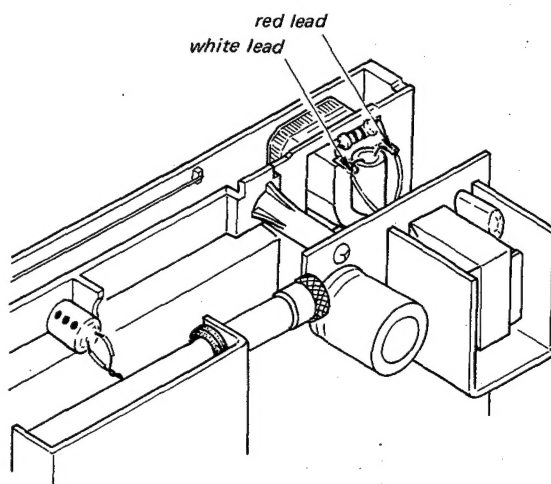


Fig. 2-9 IF-AF circuit board removal, step 5

## 2-5. POWER CIRCUIT BOARD REMOVAL

1. Remove the rear cabinet and the chassis.
2. Unsolder a black lead and a red lead as shown in Fig. 2-10.
3. Remove the two screws labeled (G) in Fig. 2-10.
4. Place the set rear-side-up on a padded work surface.
5. Remove the two screws labeled (H) in Fig. 2-11.
6. Pull off the transformer bracket carefully. (See Fig. 2-12).
7. Straighten the bent portion of two tabs with pliers as shown in Fig. 2-12.
8. Pull off the power circuit board.

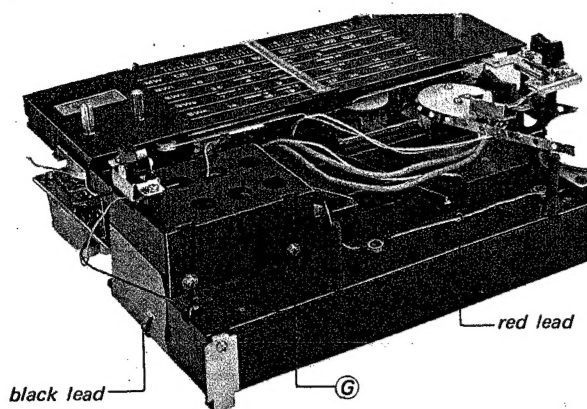


Fig. 2-10 Power circuit board removal, steps 2 and 3

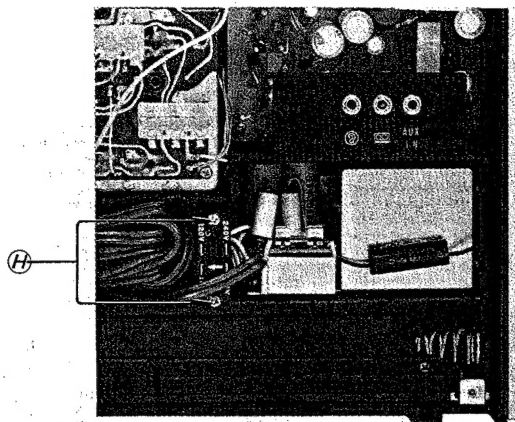


Fig. 2-11 Power circuit board removal, step 5

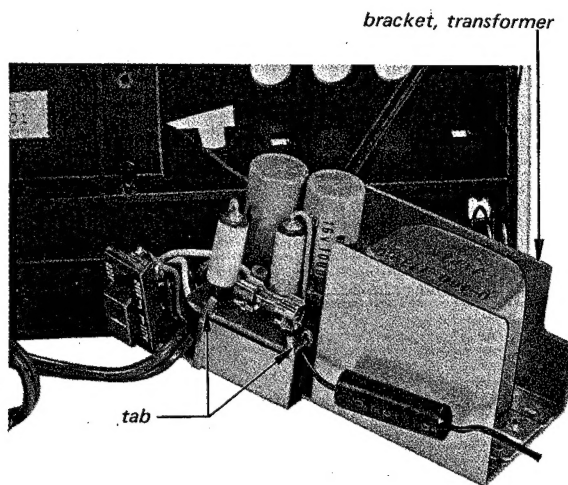
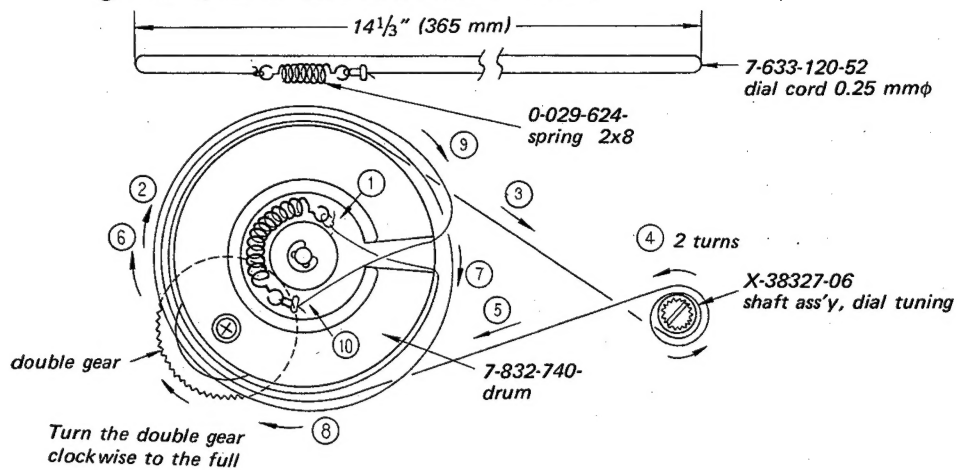


Fig. 2-12 Power circuit board removal, steps 6 and 7

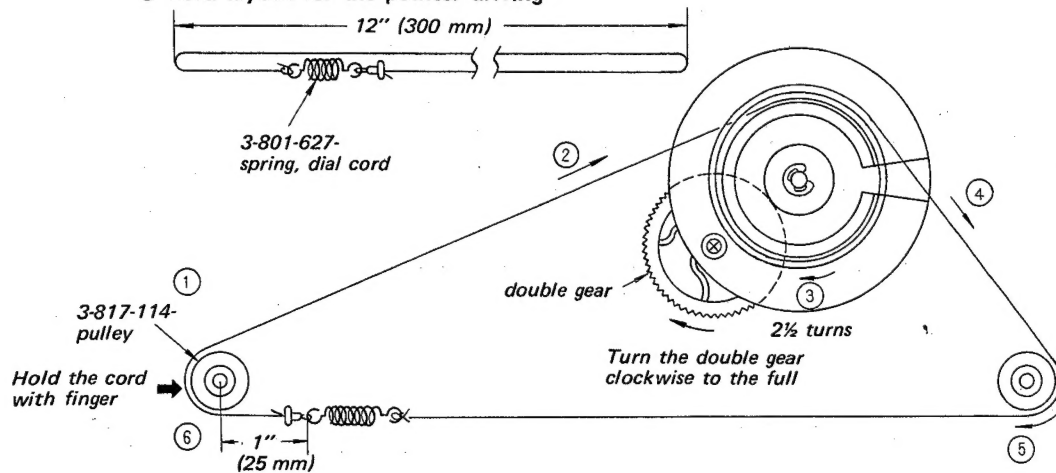


## 2-6. DIAL CORD STRINGING

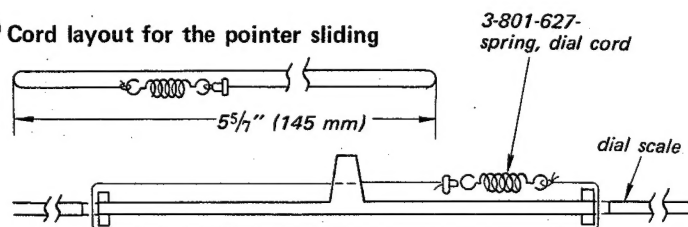
Ⓐ Cord layout for the tuning capacitor driving



Ⓑ Cord layout for the pointer driving



Ⓒ Cord layout for the pointer sliding



## SECTION 3

### CIRCUIT ADJUSTMENTS

#### 3-1. IF ADJUSTMENTS

RF Signal Generator Coupling	RF Signal Generator Frequency	VTVM Connection	Adjust	Remarks
loop antenna	455 kHz (1 kHz 30% a-m)	to earphone jack with 8 $\Omega$ load resistor in parallel.	IFT-301	1. Turn the tuning capacitor to minimum capacitance position.(band selector: MW) 2. Adjust for maximum meter reading.

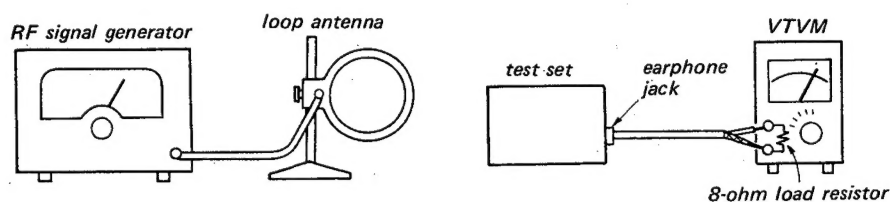


Fig. 3-1 IF adjustment, MW frequency coverage and tracking adjustment setup

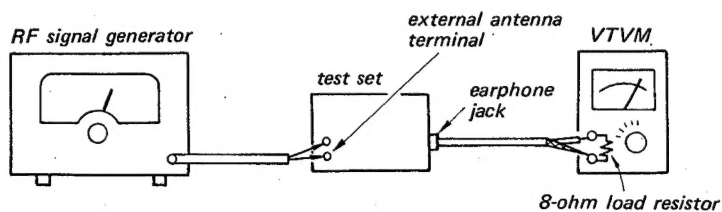


Fig. 3-2 SW frequency coverage and tracking adjustment setup

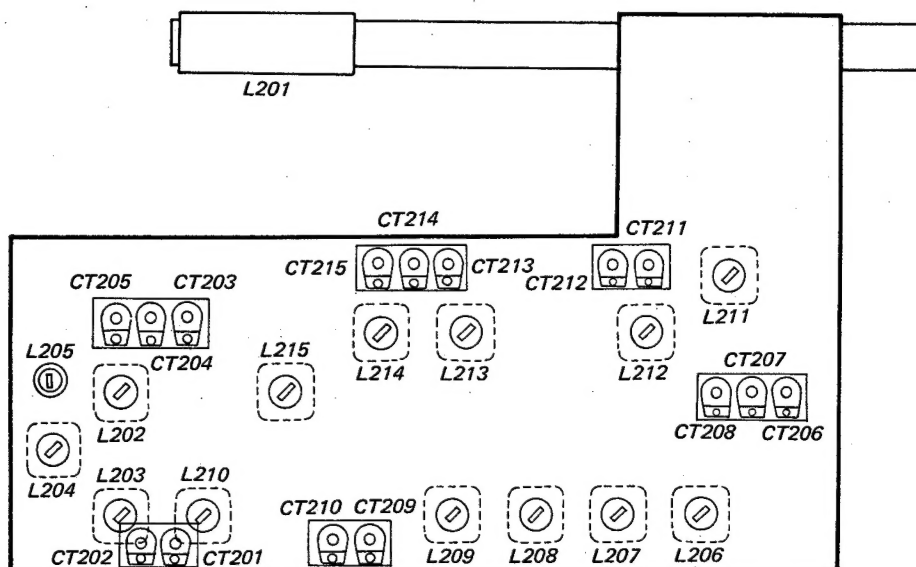


Fig. 3-3 Adjustment parts location (viewed from conductor side of CP circuit board)

### 3-2. FREQUENCY COVERAGE AND TRACKING ADJUSTMENTS

#### Receiver Control Settings:

VOLUME control : MAX  
TONE control : HIGH  
SELECT. switch : SHARP  
SENS. switch : DX

#### Rf Signal Generator Modulation:

1,000 Hz 30% amplitude-modulation

#### VTVM Connection:

to earphone jack with 8Ω load resistor in parallel

Adjusting Item	Rf Signal Generator Coupling	Rf Signal Generator Frequency	Receiver Dial Setting	Adjust	Remarks
MW Frequency Coverage	loop antenna See Fig. 3-1.	520 kHz	fully left	MW osc coil L211	Adjust for maximum meter reading.
		1,680 kHz	fully right	MW osc trimmer CT211	
MW Tracking	— ditto —	620 kHz	tune to 620 kHz signal	MW ant coil L201, MW rf coil L206	— ditto —
		1,400 kHz	tune to 1,400 kHz signal	MW ant trimmer CT201, MW rf trimmer CT206	
SW1 Frequency Coverage	direct connection to the ext. antenna terminal	1.6 MHz	fully left	SW1 osc coil L212	— ditto —
		3.5 MHz	fully right	SW1 osc trimmer CT212	
SW1 Tracking	— ditto —	1.6 MHz	tune to 1.6 MHz signal	SW1 ant coil L202, SW1 rf coil L207	— ditto —
		3.5 MHz	tune to 3.5 MHz signal	SW1 ant trimmer CT202 SW1 rf trimmer CT207	
SW2 Frequency Coverage	— ditto —	3.5 MHz	fully left	SW2 osc coil L213	— ditto —
		7.0 MHz	fully right	SW2 osc trimmer CT213	

Adjusting Item	Rf Signal Generator Coupling	Rf Signal Generator Frequency	Receiver Dial Setting	Adjust	Remarks
SW2 Tracking	direct connection to the ext. antenna terminal	3.5 MHz	tune to 3.5 MHz signal	SW2 ant coil L203, SW2 rf coil L208	Adjust for maximum meter reading.
		7.0 MHz	tune to 7.0 MHz signal	SW2 ant trimmer CT203, SW2 rf trimmer CT208	
SW3 Frequency Coverage	— ditto —	7.0 MHz	fully left	SW3 osc coil L214	— ditto —
		14.0 MHz	fully right	SW3 osc trimmer CT214	
SW3 Tracking	— ditto —	7.0 MHz	tune to 7.0 MHz signal	SW3 ant coil L204, SW3 rf coil L209	— ditto —
		14.0 MHz	tune to 14.0 MHz signal	SW3 ant trimmer CT204, SW3 rf trimmer CT209	
SW4 Frequency Coverage	— ditto —	14.0 MHz	fully left	SW4 osc coil L215	— ditto —
		26.1 MHz	fully right	SW4 osc trimmer CT215	
SW4 Tracking	— ditto —	14.0 MHz	tune to 14.0 MHz signal	SW4 ant coil L205, SW4 rf coil L210	— ditto —
		26.1 MHz	tune to 26.1 MHz signal	SW4 ant trimmer CT205, SW4 rf trimmer CT210	

# TR-1300 TR-1300

## SECTION 4

### 4-1. SCHEMATIC DIAGRAM

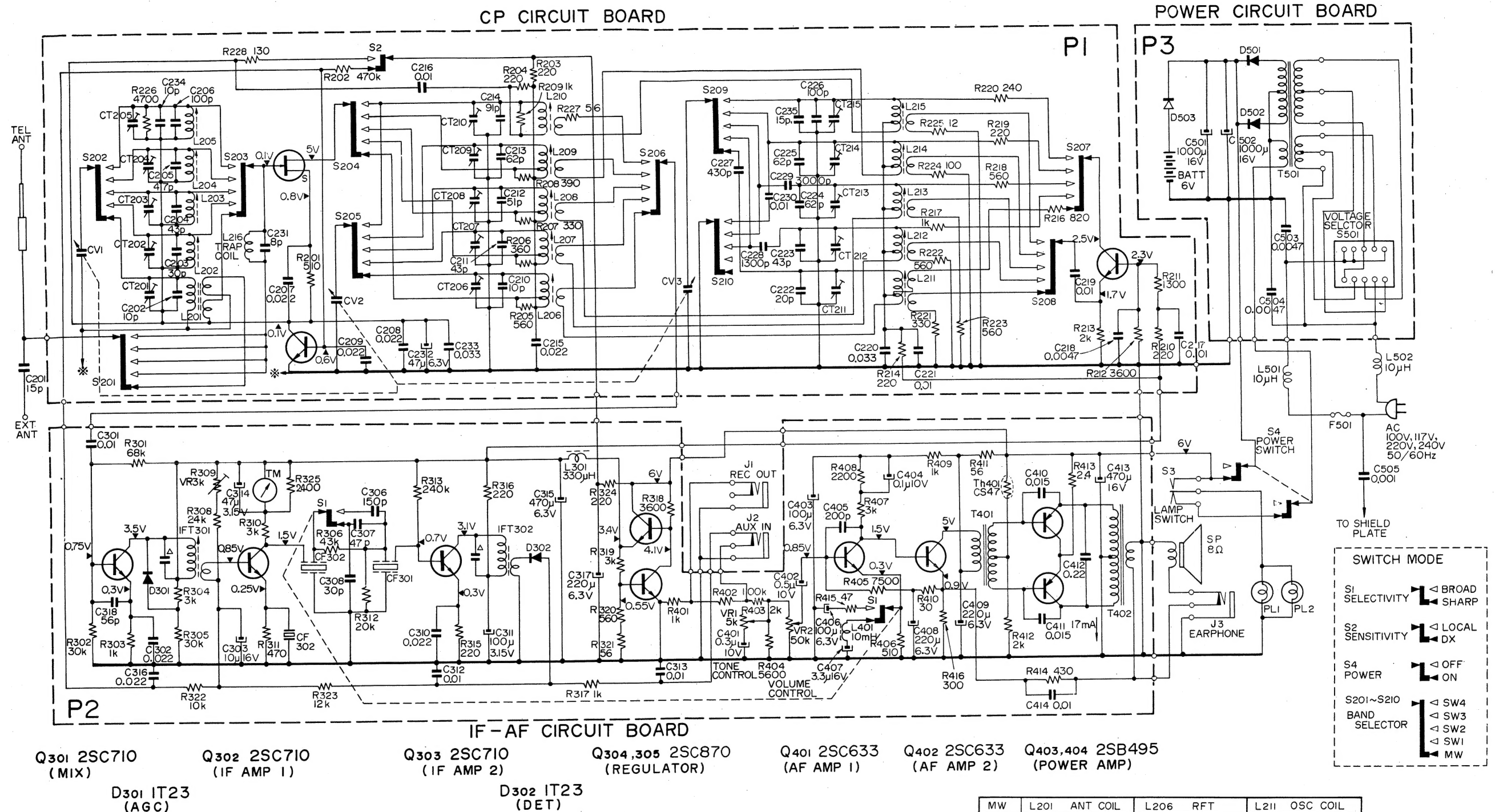
### SCHEMATIC DIAGRAM AND MOUNTING DIAGRAM

Q201 2SK23  
(RF AMP)

Q202 2SC870  
(AGC)

Q203 2SC710.  
(OSC)

D503 1T495 (SWITCH)  
D501,502 CD2 (RECTIFIER)

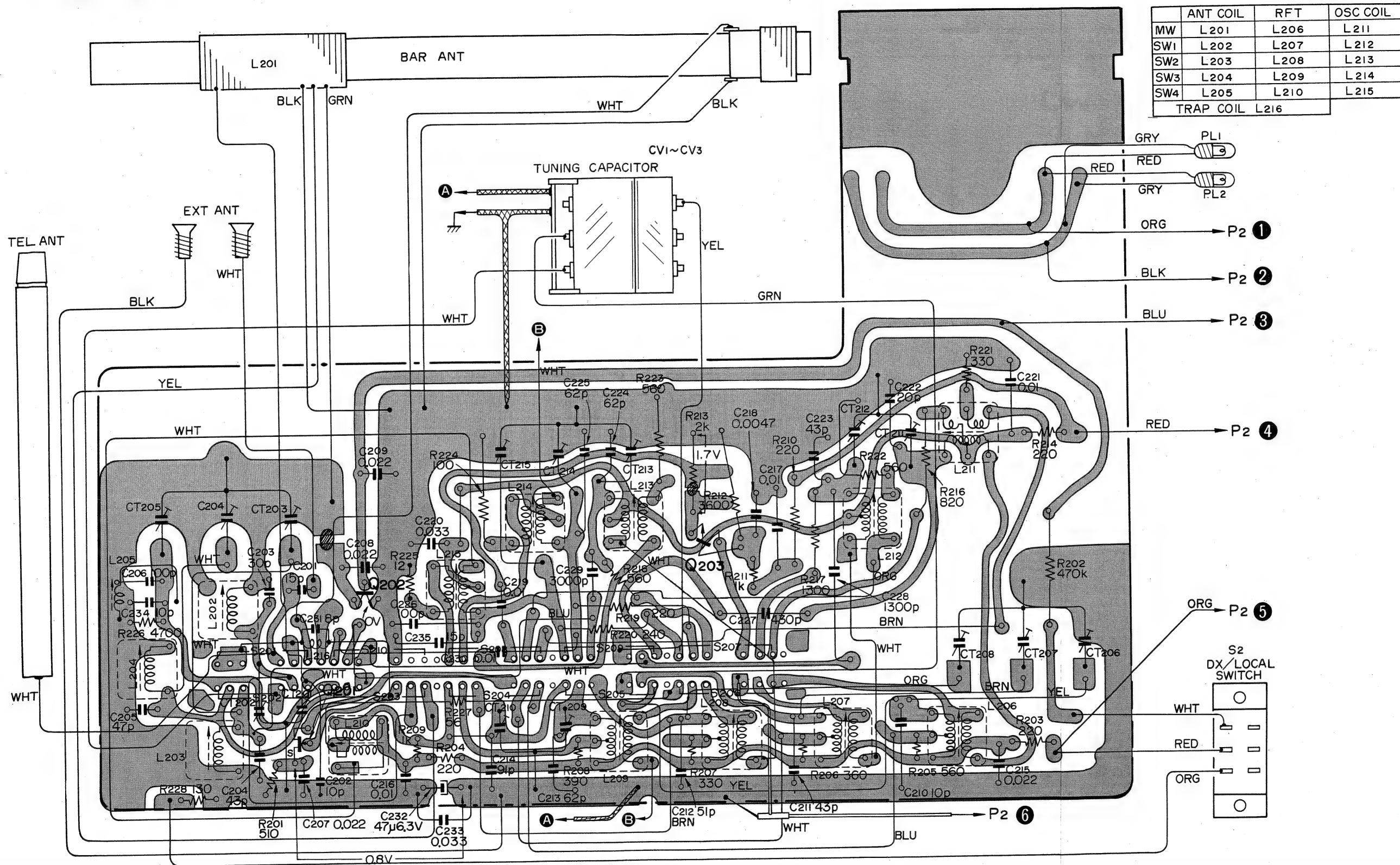


**Note:** 1. All resistors and capacitors are in ohm and  $\mu$ F, unless otherwise indicated.  
2. Capacitor marked with  $\Delta$  is built in i-f transformer.  
3. Voltage value is measured to ground circuit with a dc voltmeter (20 k $\Omega$ /V) and current value is measured with a dc ammeter.  
Voltage and current values are taken with no radio signal received.  
Variations may be noted due to normal production tolerances.

MW	L201 ANT COIL	L206 RFT	L211 OSC COIL
SW1	L202 ANT COIL	L207 RFT	L212 OSC COIL
SW2	L203 ANT COIL	L208 RFT	L213 OSC COIL
SW3	L204 ANT COIL	L209 RFT	L214 OSC COIL
SW4	L205 ANT COIL	L210 RFT	L215 OSC COIL



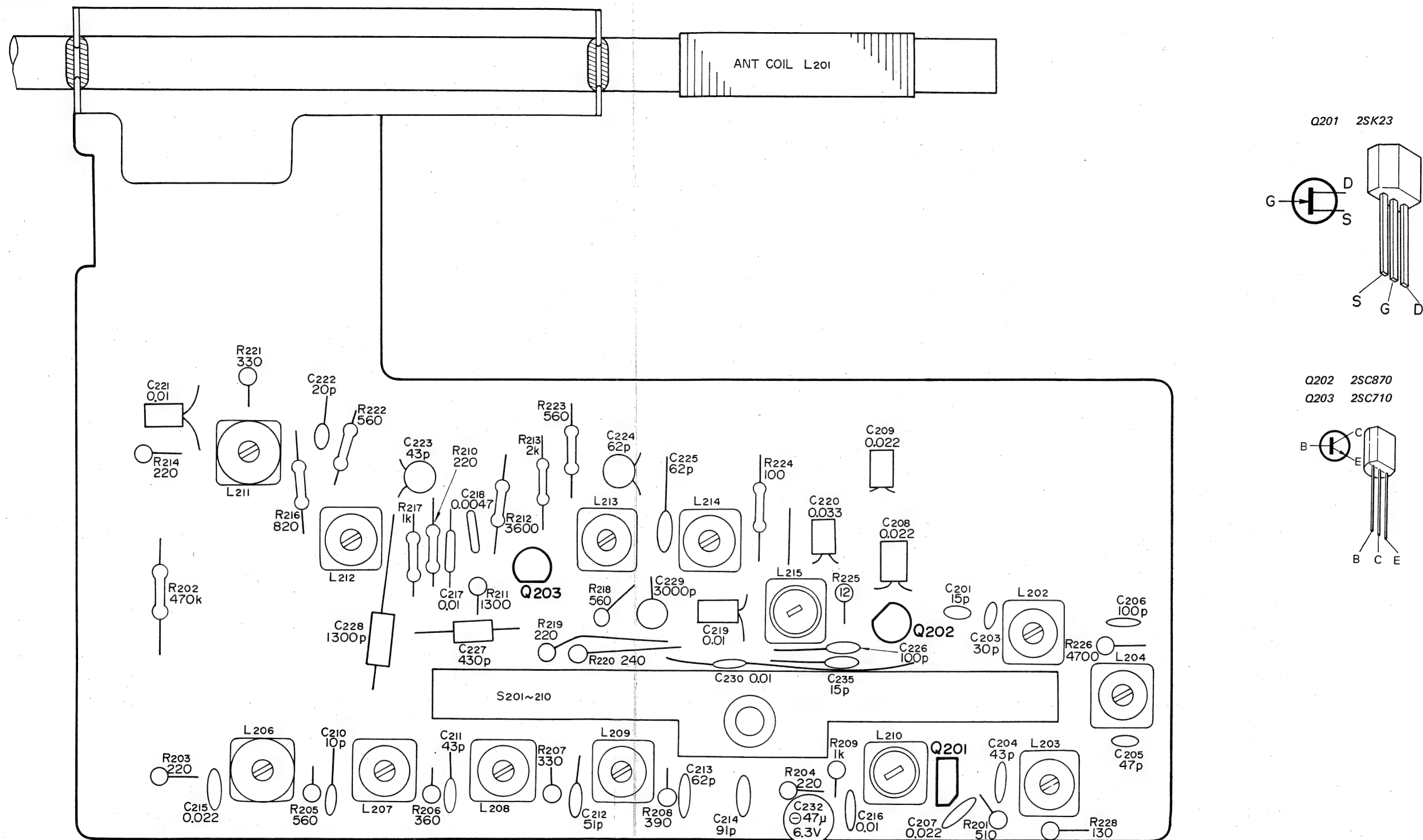
4-2. CP CIRCUIT BOARD (P1)  
MOUNTING DIAGRAM  
— Conductor side —



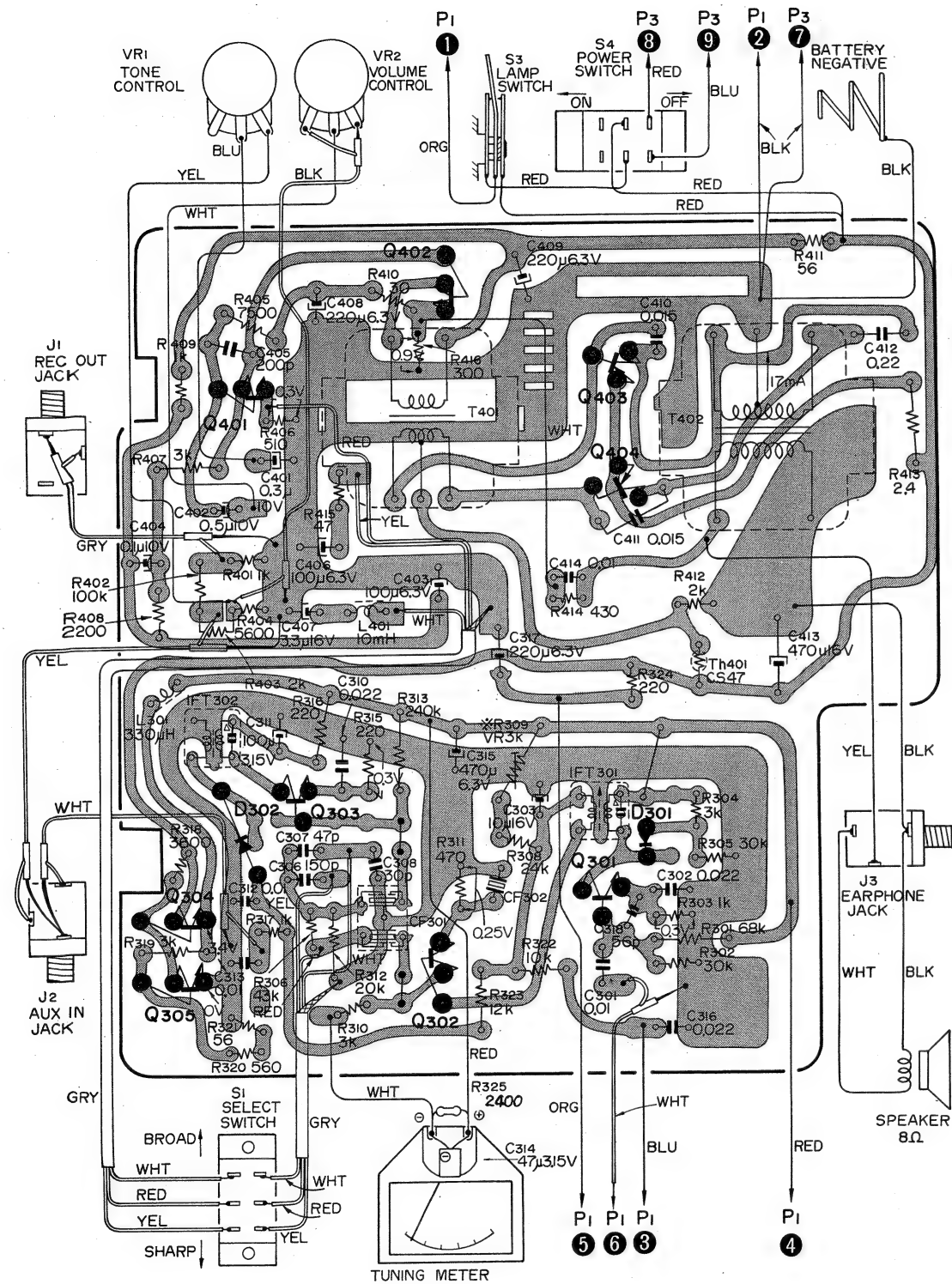
Printed circuit board  
Part No. 1-539-190-13

Note: The following components are mounted on the conductor side.  
R227, C202, C231, L205, L216, CT201-215.

4-2. CP CIRCUIT BOARD (P1)  
MOUNTING DIAGRAM  
— Component side —



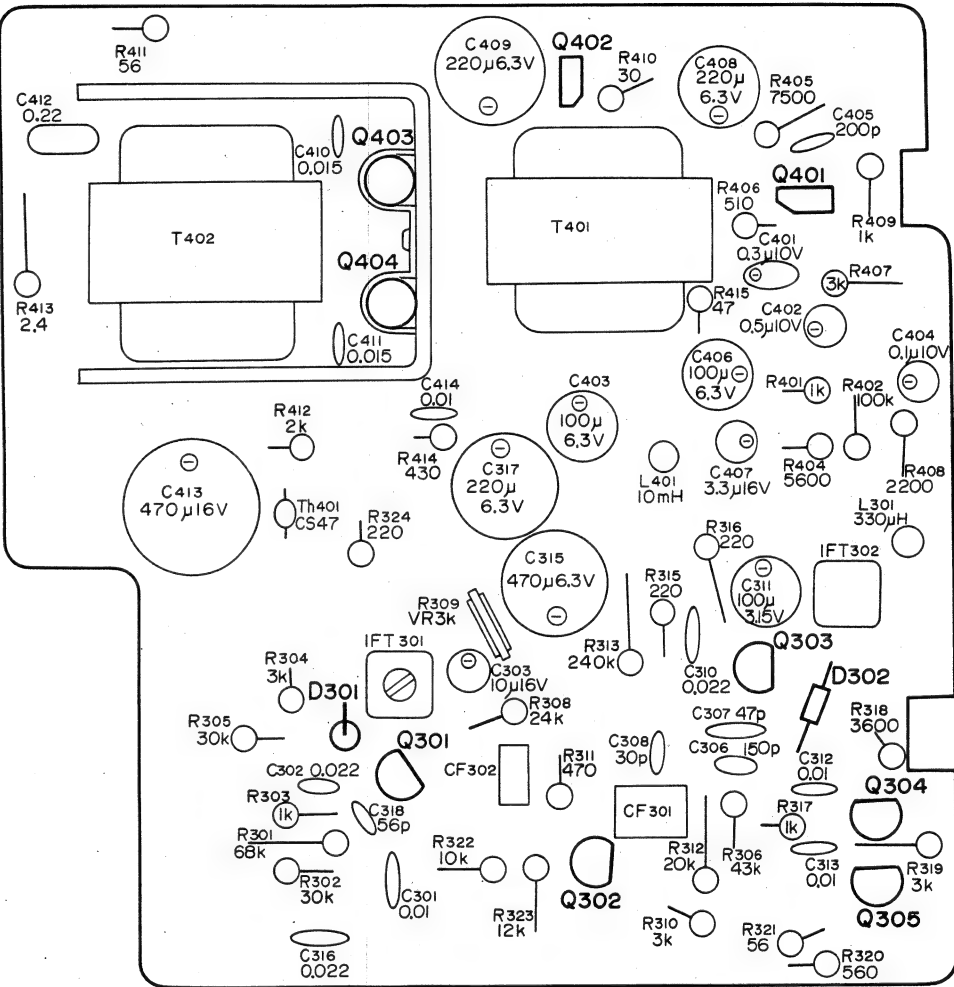
4-3. IF-AF CIRCUIT BOARD (P2)  
MOUNTING DIAGRAM  
— Conductor side —



Printed circuit board  
Part No. 1-539-191-12

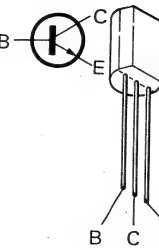
Note: The following components are mounted on the conductor side.  
R403, R416

4-3. IF-AF CIRCUIT BOARD (P2)  
MOUNTING DIAGRAM  
— Component side —

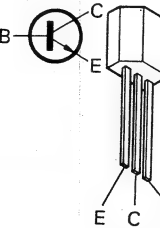


Printed circuit board  
Part No. 1-539-191-12

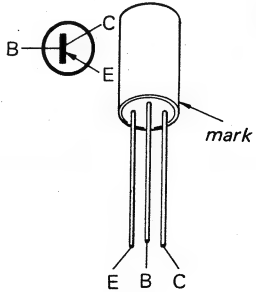
Note: The following components are mounted on the conductor side.  
R403, R416



Q301, 302, 303  
2SC710  
Q304, 305  
2SC870



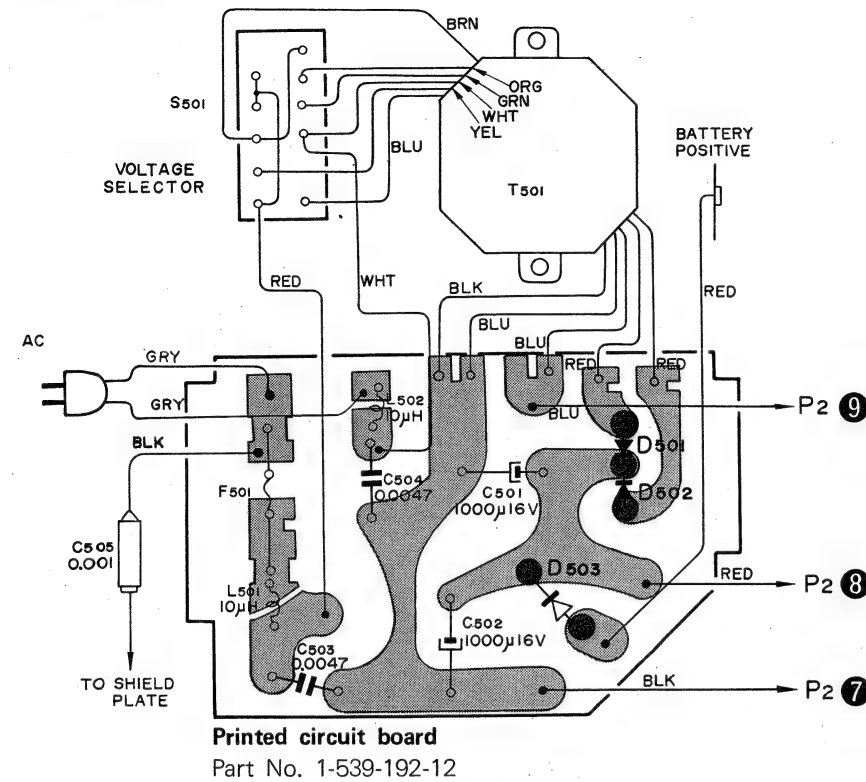
Q401, 402  
2SC633



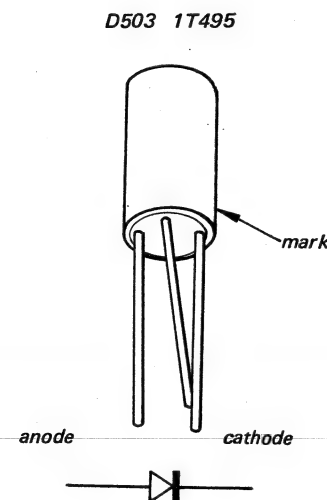
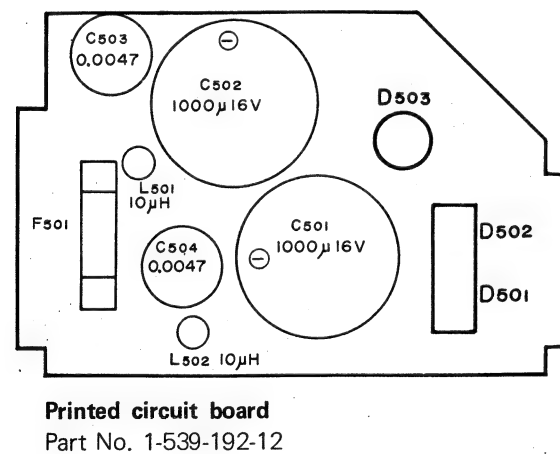
Q403, 404  
2SB495

#### 4-4. POWER CIRCUIT BOARD (P3) MOUNTING DIAGRAM

— Conductor side —

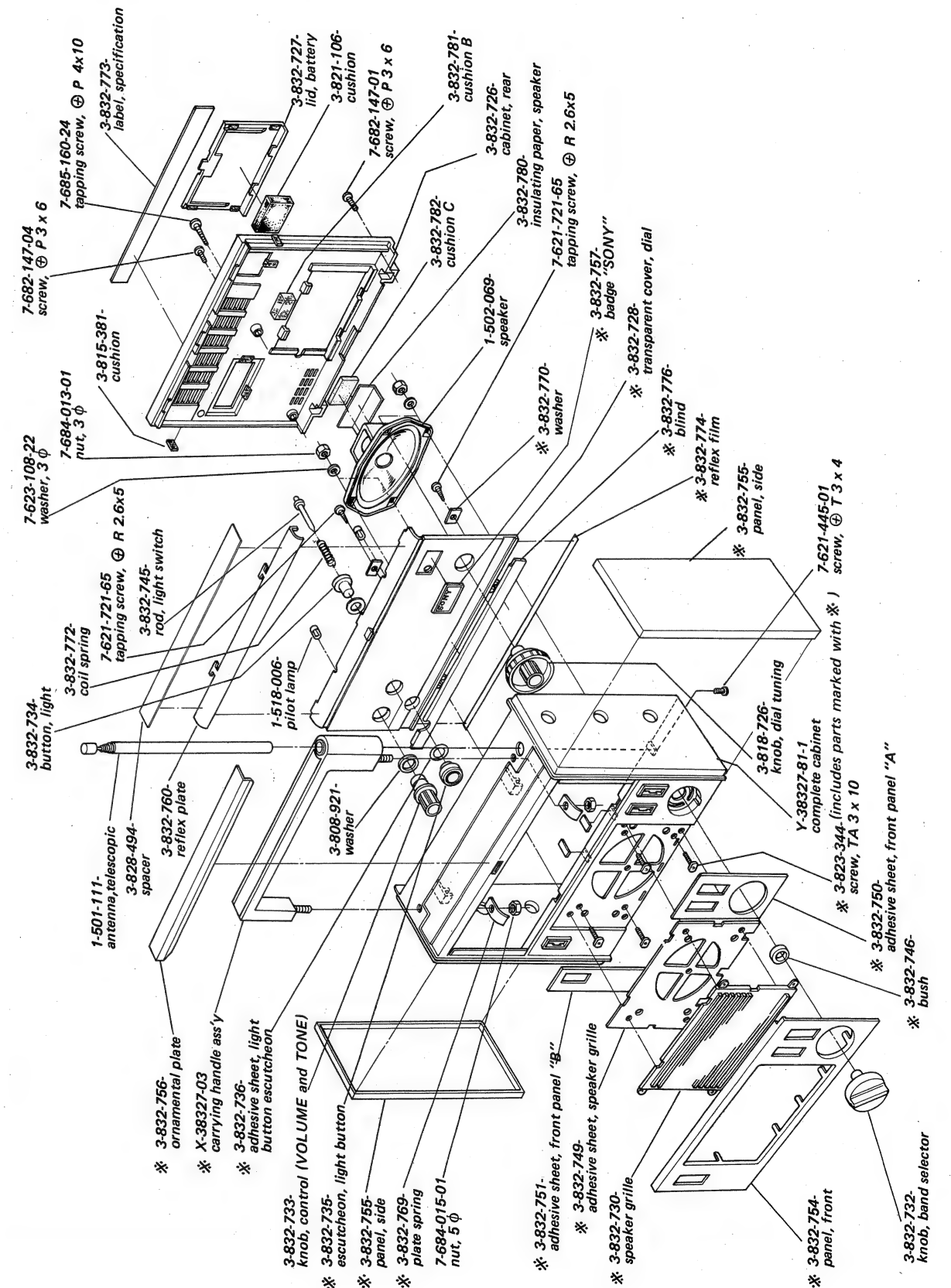


#### 4-4. POWER CIRCUIT BOARD (P3) — Component side —



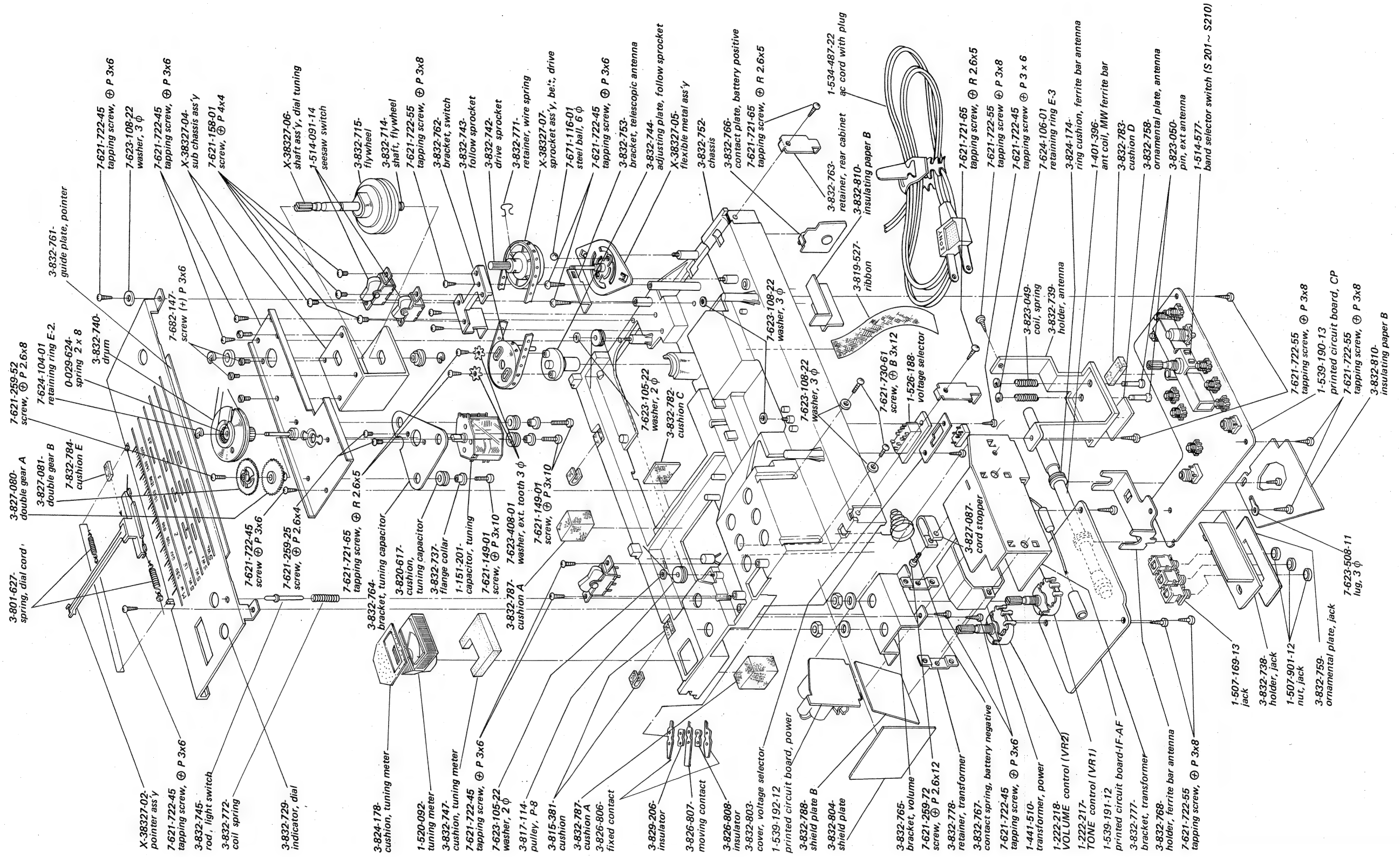
### SECTION 5 EXPLODED VIEWS

#### 5.1. EXPLODED VIEW (1)

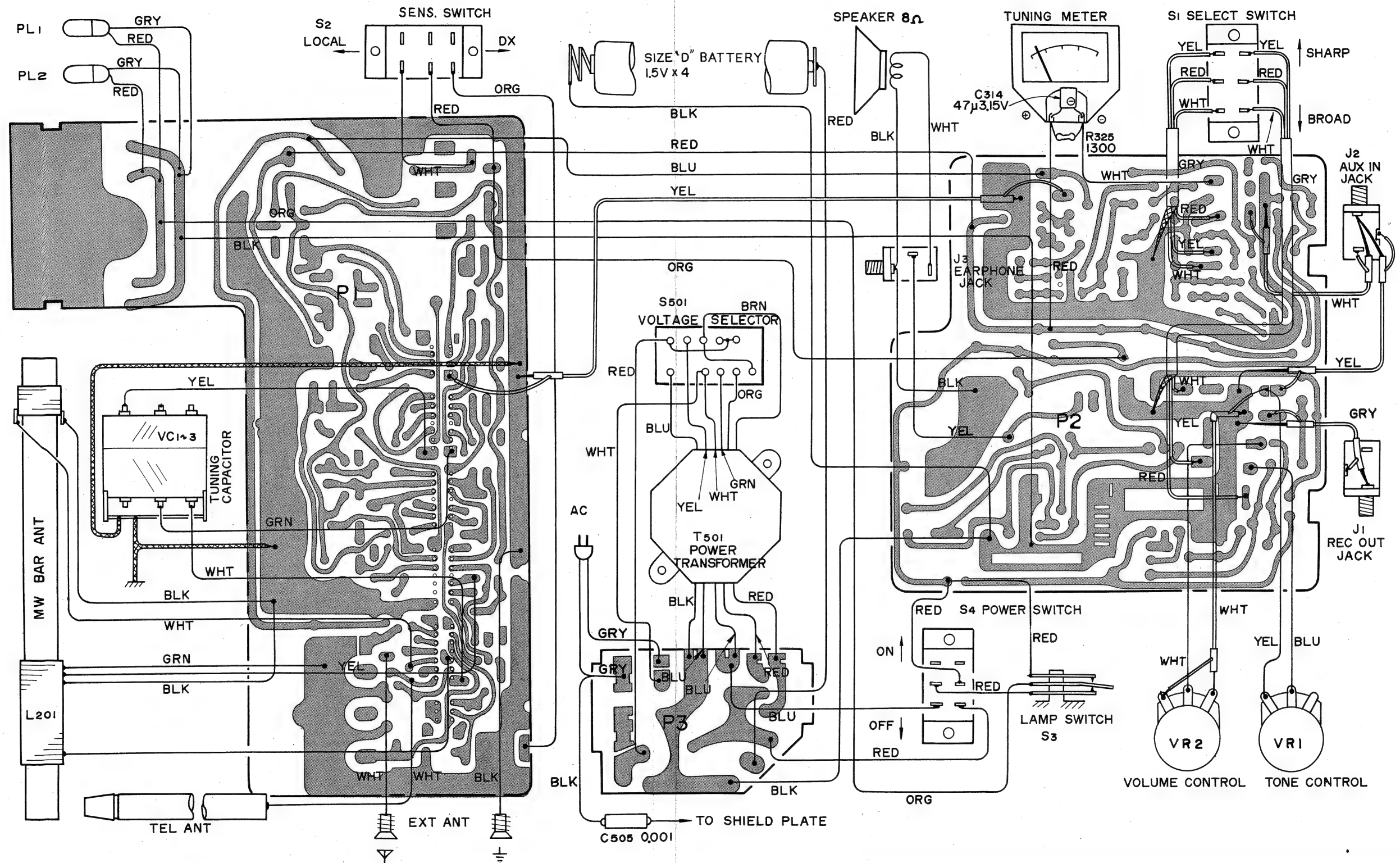




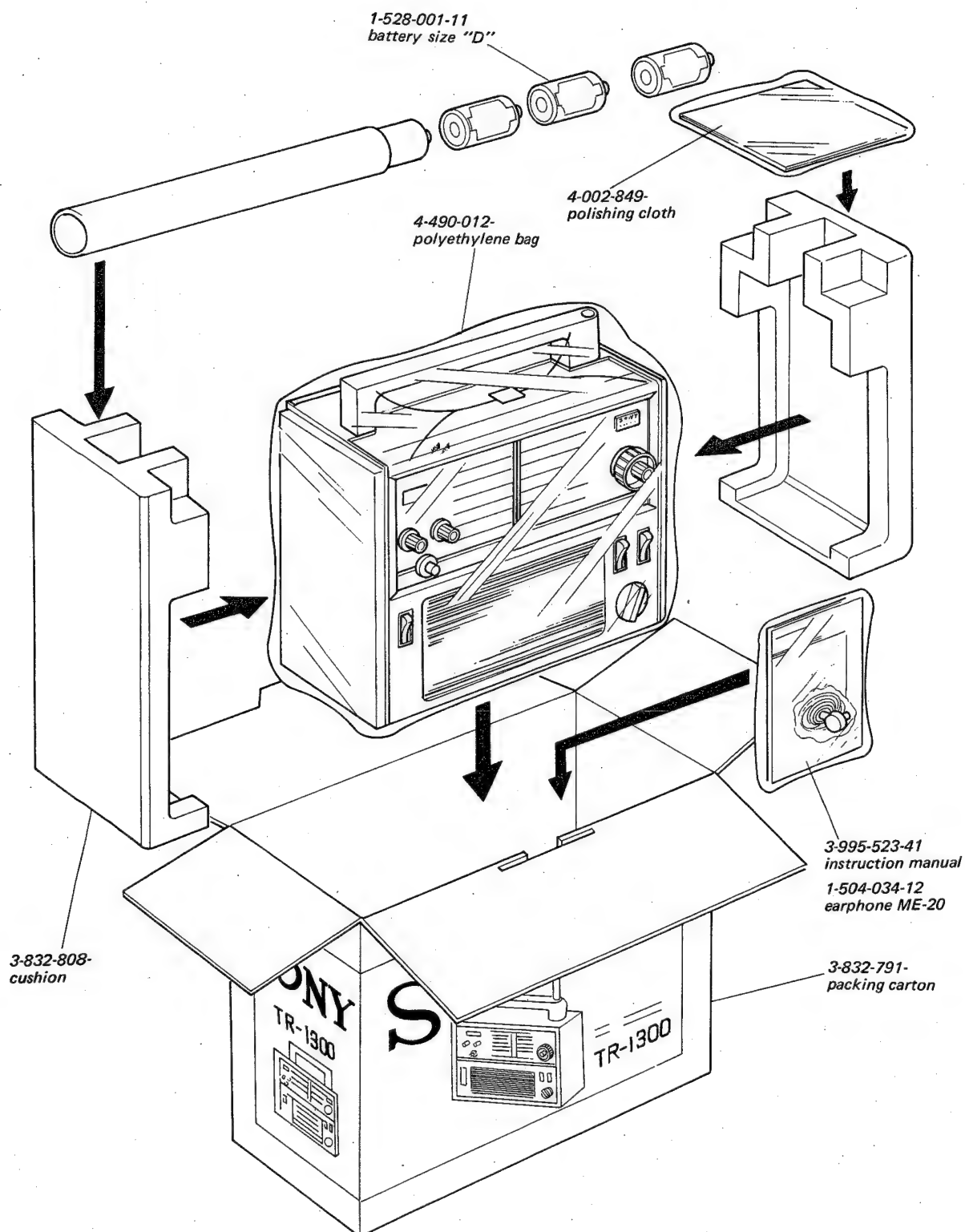
## 5-2. EXPLODED VIEW (2)



5-3. WIRING DIAGRAM



**54. PACKING**



## SECTION 6

### ELECTRICAL PARTS LIST FOR TR-1300

<i>Symbol No.</i>	<i>Part No.</i>	<i>Description</i>	<i>Symbol No.</i>	<i>Part No.</i>	<i>Description</i>
<b>Semiconductors</b>			<b>Miscellaneous</b>		
Q201		transistor 2SK23	TEL. ANT	1-501-111-	antenna, telescopic
Q202		" 2SC870	SP	1-502-069-	speaker
Q203		" 2SC710	F501	1-532-128-	fuse
Q301		" 2SC710		1-533-037-	holder, fuse
Q302		" 2SC710		1-534-487-22	ac cord with plug
Q303		" 2SC710	J1, 2, 3	1-507-169-13	jack
Q304		" 2SC870		1-507-901-12	nut, jack
Q305		" 2SC870	S1, 2, 4	1-514-091-14	seesaw switch
Q401		" 2SC633	S201-210	1-514-577-	slide switch, band selector
Q402		" 2SC633	S501	1-526-188-	voltage selector
Q403		" 2SB495	PL1, 2	1-518-006-01	pilot lamp
Q404		" 2SB495	TM	1-502-092-	tuning meter
D301		diode 1T23	<b>Resistors</b>		
D302		" 1T23	Resistors are all carbon, 1/4W ±5%, unless otherwise specified.		
D501, 502		" CD2	VR1	1-222-217-	5kΩ TONE control
D503		" 1T495	VR2	1-222-218-	50kΩ VOLUME control
Th401	8-691-002-11	thermistor CS47	R201	1-242-666-	510Ω
<b>Coils and Transformers</b>			R202	1-242-737-	470kΩ
L201	1-401-396-	ant. coil, mw ferrite bar	R203	1-242-657-	220Ω
L202	1-401-397-	" sw1	R204	1-242-657-	220Ω
L203	1-401-398-	" sw2	R205	1-242-667-	560Ω
L204	1-401-399-	" sw3	R206	1-242-662-	360Ω
L205	1-401-400-	" sw4	R207	1-242-661-	330Ω
L206	1-425-552-	rf coil, mw	R208	1-242-663-	390Ω
L207	1-425-553-	" sw1	R209	1-242-673-	1kΩ
L208	1-425-554-	" sw2	R210	1-242-657-	220Ω
L209	1-425-555-	" sw3	R211	1-242-676-	1300Ω
L210	1-425-556-	" sw4	R212	1-242-686-	3600Ω
L211	1-405-399-	osc. coil, mw	R213	1-242-680-	2kΩ
L212	1-405-400-	" sw1	R214	1-242-657-	220Ω
L213	1-405-401-	" sw2	R215		— discarded —
L214	1-405-402-	" sw3	R216	1-242-671-	820Ω
L215	1-405-403-	" sw4	R217	1-242-676-	1300Ω
L216	1-401-201-	trap coil	R218	1-242-667-	560Ω
L301	1-407-175-	micro inductor, 330μH	R219	1-242-657-	220Ω
L401	1-407-206-	" 10mH	R220	1-242-658-	240Ω
L501	1-407-190-	" 10μH	R221	1-242-661-	330Ω
L502	1-407-190-	" 10μH	R222	1-242-667-	560Ω
IFT301	1-403-137-	transformer, i-f	R223	1-242-667-	560Ω
IFT302	1-403-145-	" i-f	R224	1-242-649-	100Ω
CF301	1-403-154-	ceramic filter	R225	1-242-634-	24Ω
CF302	1-403-168-	"	R226	1-242-689-	4700Ω
T401	1-423-100-	transformer, driver	R227	1-242-643-	56Ω
T402	1-427-425-	" output	R228	1-242-652-	130Ω
T501	1-441-510-	" power			












<i>Symbol No.</i>	<i>Part No.</i>	<i>Description</i>	<i>Symbol No.</i>	<i>Part No.</i>	<i>Description</i>
R 301	1-242-717-	68k $\Omega$	CT203-205,	1-141-015-	trimmer capacitor, 3 unit
R 302	1-242-708-	30k $\Omega$	206-208,		
R 303	1-242-673-	1k $\Omega$	213-215		
R 304	1-242-684-	3k $\Omega$	C201	1-101-899-	15pF ceramic
R 305	1-242-708-	30k $\Omega$	C202	1-101-960-	10pF "
R 306	1-242-712-	43k $\Omega$	C203	1-101-900-	30pF "
R 307		— discarded —	C204	1-101-879-	43pF "
R 308	1-242-706-	24 $\Omega$	C205	1-101-881-	47pF "
R 309	1-222-810-	VR 3k $\Omega$	C206	1-101-963-	100pF "
R 310	1-242-684-	3k $\Omega$	C207	1-105-837-12	0.022 $\mu$ F mylar
R 311	1-242-665-	470 $\Omega$	C208	1-105-837-12	0.022 $\mu$ F "
R 312	1-242-704-	20k $\Omega$	C209	1-105-837-12	0.022 $\mu$ F "
R 313	1-242-730-	240k $\Omega$	C210	1-101-960-	10pF ceramic
R 314		— discarded —	C211	1-101-879-	43pF "
R 315	1-242-657-	220 $\Omega$	C212	1-101-883-	51pF "
R 316	1-242-657-	220 $\Omega$	C213	1-101-887-	62pF "
R 317	1-242-673-	1k $\Omega$	C214	1-101-895-	91pF "
R 318	1-242-686-	3600 $\Omega$	C215	1-105-837-12	0.022 $\mu$ F mylar
R 319	1-242-684-	3k $\Omega$	C216	1-105-833-12	0.01 $\mu$ F "
R 320	1-242-667-	560 $\Omega$	C217	1-105-833-12	0.01 $\mu$ F "
R 321	1-242-643-	56 $\Omega$	C218	1-105-829-12	0.0047 $\mu$ F "
R 322	1-242-697-	10k $\Omega$	C219	1-105-833-12	0.01 $\mu$ F "
R 323	1-242-699-	12k $\Omega$	C220	1-105-833-12	0.01 $\mu$ F "
R 324	1-242-657-	220 $\Omega$	C221	1-105-833-12	0.01 $\mu$ F "
R 325	1-242-681-	2400 $\Omega$	C222	1-101-898-	20pF ceramic
R 401	1-242-673-	1k $\Omega$	C223	1-101-879-	43pF "
R 402	1-242-721-	100k $\Omega$	C224	1-101-887-	62pF "
R 403	1-242-680-	2k $\Omega$	C225	1-101-887-	62pF "
R 404	1-242-691-	5600 $\Omega$	C226	1-101-963-	100pF "
R 405	1-242-694-	7500 $\Omega$	C227	1-103-616-	430pF "
R 406	1-242-666-	510 $\Omega$	C228	1-103-628-	1300pF "
R 407	1-242-684-	3k $\Omega$	C229	1-103-636-	3000pF "
R 408	1-242-681-	2200 $\Omega$	C230	1-105-833-12	0.01 $\mu$ F mylar
R 409	1-242-673-	1k $\Omega$	C231	1-102-810-	8pF ceramic
R 410	1-242-636-	30 $\Omega$	C232	1-121-322-	47 $\mu$ F 6.3V electrolytic
R 411	1-242-643-	56 $\Omega$	C233	1-105-839-12	0.033 $\mu$ F mylar
R 412	1-242-680-	2k $\Omega$	C234	1-101-960-	10pF ceramic
R 413	1-244-810-	2.4 $\Omega$	C235	1-101-899-	15pF "
R 414	1-242-664-	430 $\Omega$	C301	1-105-833-12	0.01 $\mu$ F mylar
R 415	1-242-641-	47 $\Omega$	C302	1-105-837-12	0.022 $\mu$ F "
R 416	1-242-660-	300 $\Omega$	C303	1-121-347-	10 $\mu$ F 16V electrolytic
<b>Capacitors</b>			C304		— discarded —
CV1-3	1-151-201-	tuning capacitor	C305		— discarded —
CT201, 202	1-141-011-	trimmer capacitor, 2 unit	C306	1-107-138-	150pF mica
209, 210			C307	1-101-881-	47pF ceramic
211, 212			C308	1-101-900-	30pF "
			C309		— discarded —

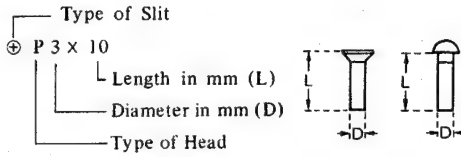
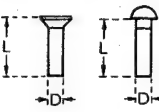
Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
C310	1-105-837-12	0.022 $\mu$ F mylar	C406	1-121-291-	100 $\mu$ F 6.3V electrolytic
C311	1-121-290-	100 $\mu$ F 3.15V electrolytic	C407	1-121-344-	3.3 $\mu$ F 16V "
C312	1-105-833-12	0.01 $\mu$ F mylar	C408	1-121-295-	220 $\mu$ F 6.3V "
C313	1-105-833-12	0.01 $\mu$ F "	C409	1-121-295-	220 $\mu$ F 6.3V "
C314	1-121-486-	47 $\mu$ F 3.15V electrolytic	C410	1-105-835-12	0.015 $\mu$ F mylar
C315	1-121-359-	470 $\mu$ F 6.3V "	C411	1-105-835-12	0.015 $\mu$ F "
C316	1-105-837-12	0.022 $\mu$ F mylar	C412	1-105-849-12	0.22 $\mu$ F "
C317	1-121-295-	220 $\mu$ F 6.3V electrolytic	C413	1-121-727-	470 $\mu$ F 16V electrolytic
C318	1-101-885-	56pF ceramic	C414	1-105-833-12	0.01 $\mu$ F mylar
C401	1-127-021-	0.3 $\mu$ F 10V aluminum solid	C501	1-121-186-	1000 $\mu$ F 16V electrolytic
C402	1-127-022-	0.5 $\mu$ F 10V "	C502	1-121-186-	1000 $\mu$ F 16V "
C403	1-121-291-	100 $\mu$ F 6.3V electrolytic	C503	1-115-071-	0.0047 $\mu$ F metalized paper
C404	1-127-019-	0.1 $\mu$ F 10V aluminum solid	C504	1-115-071-	0.0047 $\mu$ F "
C405	1-107-138-	200pF mica	C505	1-115-097-	0.001 $\mu$ F "

When ordering replacement parts, you should use **PART NUMBER** listed on the **PARTS LISTS** or shown in the **EXPLODED VIEW**. The symbol number should not be used for ordering purposes.

#### Hardware Nomenclature

<b>P</b> - Pan Head Screw		<b>E</b> - Retaining Ring (E Washer)	
<b>K</b> - Flat Countersunk Head Screw		W - Washer	
<b>B</b> - Binding Head Screw		SW - Spring Washer	
<b>RK</b> - Oval Countersunk Head Screw		LW - Lock Washer	
<b>T</b> - Truss Head Screw		N - Nut	
<b>R</b> - Round Head Screw			
<b>F</b> - Flat Fillister Head Screw			
<b>SC</b> - Set Screw			

— Example —	
 <p>           Type of Slit            P 3 x 10            Length in mm (L)            Diameter in mm (D)            Type of Head         </p>	

1431 ?

Complete Spare Parts List for TR-1300

August, 1969

<u>Part No.</u>	<u>Description</u>	<u>Unit Price</u>
<u>A. Cabinet and Appearance Items</u>		
Y-38327-81-1	Complete Cabinet, including -----	\$5.97
X-38327-01-	Cabinet Ass'y, main -----	0.87
X-38327-03-	Carrying Handle Ass'y -----	0.37
3-832-726-	Cabinet, rear -----	0.36
3-832-727-	Lid, battery -----	0.11
3-832-728-	Transparent Cover, dial -----	0.43
3-832-729-	Indicator, dial -----	0.28
3-832-730-	Speaker Grille -----	0.94
3-832-749-	Adhesive Sheet, speaker grille -----	0.11
3-832-750-	Adhesive Sheet, front panel "A" -----	0.04
3-832-751-	Adhesive Sheet, front panel "B" -----	0.02
3-832-754-	Panel, front -----	0.59
3-832-755-	Panel, side -----	0.43
3-832-756-	Ornamental Plate -----	0.11
3-832-757-	Badge, "SONY" -----	0.11
3-832-758-	Ornamental Plate, antenna -----	0.03
3-832-759-	Ornamental Plate, jack -----	0.06
3-832-773-	Label, specification -----	0.09
* * * *		
3-832-732-	Knob, band selector -----	0.03
3-832-733-	Knob, VOLUME and TONE control -----	0.10
3-832-734-	Button, pilot lamp -----	0.02
3-818-726-	Knob, dial tuning -----	0.14
<u>B. Mechanical Parts</u>		
X-38327-02-	Pointer Ass'y -----	0.11
X-38327-04-	Sub Chassis Ass'y -----	0.17
X-38327-05-	Flexible Metal Ass'y -----	0.13
X-38327-06-	Shaft Ass'y, dial tuning -----	0.45



<u>Part No.</u>	<u>Description</u>	<u>Unit Price</u>
X-38327-07-	Sprocket Ass'y, belt drive -----	\$0.05
3-832-735-	Escutcheon, lamp button -----	0.01
3-832-736-	Adhesive Sheet, escutcheon -----	0.01
3-832-737-	Flange Collar -----	0.02
3-832-738-	Holder, jack -----	0.04
3-832-739-	Holder, antenna -----	0.05
3-832-740-	Drum -----	0.04
3-832-742-	Drive Sprocket -----	0.08
3-832-743-	Follow Sprocket -----	0.06
3-832-744-	Adjusting Plate, follow sprocket -----	0.05
3-832-745-	Rod, lamp switch -----	0.03
3-832-746-	Bush -----	0.02
3-832-747-	Cushion, tuning meter -----	0.01
3-832-748-	Spacer, adjusting plate -----	0.01
3-832-752-	Chassis -----	0.50
3-832-753-	Bracket, telescopic antenna -----	0.04
3-832-760-	Reflex Plate -----	0.15
3-832-761-	Guide Plate, pointer -----	0.04
3-832-762-	Bracket, switch -----	0.05
3-832-763-	Bracket, cabinet rear -----	0.03
3-832-764-	Bracket, tuning capacitor -----	0.03
3-832-765-	Bracket, volume -----	0.04
3-832-766-	Contact Plate, battery positive -----	0.02
3-832-767-	Contact Spring, battery negative -----	0.03
3-832-768-	Holder, ferrite bar antenna -----	0.06
3-832-769-	Plate Spring -----	0.03
3-832-770-	Washer -----	0.01
3-832-771-	Retainer, wire spring -----	0.02
3-832-772-	Coil Spring -----	0.01
3-832-774-	Reflex Film -----	0.02
3-832-775-	Heat Sink -----	0.06
3-832-777-	Chassis, transformer -----	0.12
3-832-778-	Retainer -----	0.02
0-029-624-	Spring 2 x 8 -----	0.01
3-450-048-	Clamper, transistor -----	0.03
3-801-627-	Spring, dial cord -----	0.01
3-806-315-	Felt Ring -----	0.01
3-808-921-	Washer -----	0.01
3-817-114-	Pulley -----	0.01
3-819-527-	Ribbon -----	0.02
3-820-617-	Cushion, tuning capacitor -----	0.02
3-821-106-	Cushion, battery lid -----	0.02



<u>Part No.</u>	<u>Description</u>	<u>Unit Price</u>
3-823-344-	Screw, machine TA 3 x 10 -----	\$0.01
3-824-174-	Cushion, ferrite bar antenna -----	0.02
3-824-178-	Cushion, tuning meter -----	0.02
3-827-080-	Double Gear "A" -----	0.03
3-827-081-	Double Gear "B" -----	0.03
3-827-087-	Cord Stopper -----	0.02

#### C. Electrical Parts

1-539-190-11	Printed Circuit Board, CP -----	0.52
1-539-191-11	Printed Circuit Board, IF-AF -----	0.22
1-539-192-11	Printed Circuit Board, power -----	0.06
1-526-188-	Voltage Selector -----	0.35
1-532-127-	Fuse -----	0.04
1-533-037-	Holder, fuse -----	0.01
1-534-487-	AC Cord with Plug -----	0.27
1-501-111-	Antenna, telescopic -----	1.13
1-502-069-	Speaker -----	0.71
1-507-169-13	Jack -----	0.05
1-507-901-12	Nut, jack -----	0.01
1-514-091-	Seesaw Switch -----	0.17
1-518-006-	Pilot Lamp -----	0.08
1-520-092	Tuning Meter -----	1.04

#### Coil and Transformer

1-401-201-	Trap Coil -----	0.03
1-401-397-	Ant. Coil, SW1 -----	0.11
1-401-398-	Ant. Coil, SW2 -----	0.11
1-401-399-	Ant. Coil, SW3 -----	0.11
1-401-400-	Ant. Coil, SW4 -----	0.05
1-401-396-	Ant. Coil, MW ferrite bar -----	0.34
1-403-137-	Transformer, AM/IF -----	0.10
1-403-145-	Transformer, AM/IF -----	0.11
1-403-154-	Ceramic Filter -----	0.10
1-403-168-	Ceramic Filter -----	0.21
1-405-399-	Osc. Coil, MW -----	0.11
1-405-400-	Osc. Coil, SW1 -----	0.11
1-405-401-	Osc. Coil, SW2 -----	0.11
1-405-402-	Osc. Coil, SW3 -----	0.11



<u>Part No.</u>	<u>Description</u>		<u>Unit Price</u>
1-101-879-	C204,211,223	43pF $\pm 10\%$ -----	\$0.02
1-101-881-	C205	47pF $\pm 10\%$ -----	0.02
1-101-883-	C212	51pF $\pm 10\%$ -----	0.02
1-101-885-	C307,318	56pF $\pm 10\%$ -----	0.02
1-101-887-	C213,224,225	62pF $\pm 10\%$ -----	0.02
1-101-895-	C214	91pF $\pm 10\%$ -----	0.02
1-101-963-	C206-2,226-2	100pF $\pm 10\%$ -----	0.02
1-102-810-	C231	8pF $\pm 1pF$ -----	0.02

#### Styrol Capacitor

1-103-616-	C227	430pF $\pm 5\%$ -----	0.03
1-103-628-	C228	1300pF $\pm 5\%$ -----	0.04
1-103-636-	C229	3000pF $\pm 5\%$ -----	0.04

#### Mylar Capacitor

1-105-829-12	C218	0.0047 $\mu$ F $\pm 20\%$ -----	0.02
1-105-833-12	C215,217,219,221, 230,313,314,312, 301	0.01 $\mu$ F $\pm 20\%$ -----	0.02
1-105-835-12	C410,411	0.015 $\mu$ F $\pm 20\%$ -----	0.02
1-105-837-12	C207,208,209,216, 302,310	0.022 $\mu$ F $\pm 20\%$ -----	0.03
1-105-839-12	C231,220	0.033 $\mu$ F $\pm 20\%$ -----	0.03
1-105-849-12	C412	0.22 $\mu$ F $\pm 20\%$ -----	0.09

#### Electrolytic Capacitor (Mica)

1-107-138-	C405,306	200pF $\pm 10\%$ -----	0.02
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#### Electrolytic Capacitor

1-121-344-	C407	3.3 $\mu$ F 25WV +150 -10% -----	0.04
1-121-347-	C303	10 $\mu$ F 16WV +100 -10% -----	0.04
1-121-322-	C232	47 $\mu$ F 6.3WV +100 -10% -----	0.04
1-121-290-	C311,409	100 $\mu$ F 3.15WV +100 -10% -----	0.05
1-121-291-	C403	100 $\mu$ F 6.3WV +100 -10% -----	0.05
1-121-295-	C317,408,409	220 $\mu$ F 6.3WV +100 -10% -----	0.07
1-121-359-	C315	470 $\mu$ F 6.3WV +100 -10% -----	0.07
1-121-727-	C413	470 $\mu$ F 16WV +100 -10% -----	0.12
1-121-186-	C503,504	1000 $\mu$ F 16WV +200 -10% -----	0.12



<u>Part No.</u>	<u>Description</u>	<u>Unit Price</u>
<u>Electrolytic Capacitor (Paper)</u>		
1-115-071-	C501,502 0.0047 $\mu$ F $\pm$ 20% -----	\$0.09
<u>Electrolytic Capacitor (Alox)</u>		
1-127-019-	C404 0.1 $\mu$ F 10WV $\pm$ 20% -----	0.05
1-127-021-	C401 0.3 $\mu$ F 10WV $\pm$ 20% -----	0.05
1-127-022-	C404 0.5 $\mu$ F 10WV $\pm$ 20% -----	0.06
D. <u>Screw, Nut and Washer</u>		(per 100)
<u>Screw, machine</u>		
7-621-259-25	(+) P 2.6 x 4 (for Tuning Capacitor) -----	0.14/100
7-621-259-52	(+) P 2.6 x 8 (for Double Gear) -----	0.26/100
7-621-259-72	(+) P 2.6 x 12 (for Cord Stopper) -----	0.34/100
7-621-147-01	(+) P 3 x 6 (for Tuning Shaft, Telescopic Antenna Holding Bracket) -----	0.12/100
7-621-147-04	(+) P 3 x 6 (for Rear Cabinet) -----	0.50/100
7-621-149-01	(+) P 3 x 10 (for Tuning Capacitor, Transformer Chassis) -----	0.13/100
7-621-158-01	(+) P 4 x 4 (for Switch) -----	0.23/100
7-621-445-01	(+) T 3 x 4 (for Telescopic Antenna) -----	0.14/100
<u>Screw, self-tapping</u>		
7-621-721-65	(+) R 2.6 x 5 (for Sprocket Adjusting Shaft, Rear Cabinet Holding Bracket) -----	0.30/100
7-621-722-45	(+) P 3 x 6 (for Volume Holder, Dial Scale, Sub-chassis, Slide Switch, Switch Holding Plate) -----	0.25/100
7-621-722-55	(+) P 3 x 8 (for CP Board, IF Board, Telescopic Antenna Holding Bracket) -----	0.25/100
7-621-730-61	(+) P 3 x 12 (for Chassis) -----	0.28/100
7-685-160-24	(+) P 4 x 10 (for Rear Cabinet) -----	0.27/100

7/9 (TR-1300)

(R1-34)



<u>Part No.</u>	<u>Description</u>	<u>Unit Price</u>
<u>Nut</u>		
7-684-013-01	3ø (for Speaker) -----	\$0.28/100
7-684-015-01	5ø (for Carrying Handle) -----	0.64/100
<u>Washer, plain</u>		
7-623-105-22	2ø (Large) (for Pulley) -----	0.07/100
7-623-108-22	3ø ( " ) (for Speaker, Transformer Chassis) -----	0.15/100
<u>Lug</u>		
7-623-508-11	3ø (for Dial Drum) -----	0.13/100
<u>Eyelet</u>		
7-623-611-01	1.5 x 3 (for Dial Cord, Pointer Guide) ----	0.05/100
<u>Retaining Ring</u>		
7-624-104-01	E-2 (for Dial Drum) -----	0.35/100
7-624-106-01	E-3 (for Ext. Ant. Terminal, Ext. Ground Terminal) -----	0.38/100
<u>Steel Ball</u>		
7-671-116-01	6mmø (for Driving Sprocket) -----	0.57/100
<u>Dial Cord</u>		
7-633-120-52	0.25ø 1400mm -----	0.02/m